

DER Systems Interconnection Technologies Workshop

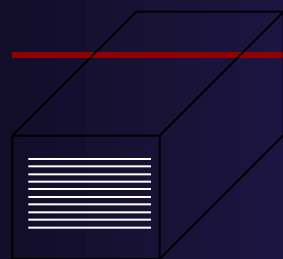
Presented by
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Technologies

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Traditional Design Configurations

On-Site Electrical Systems



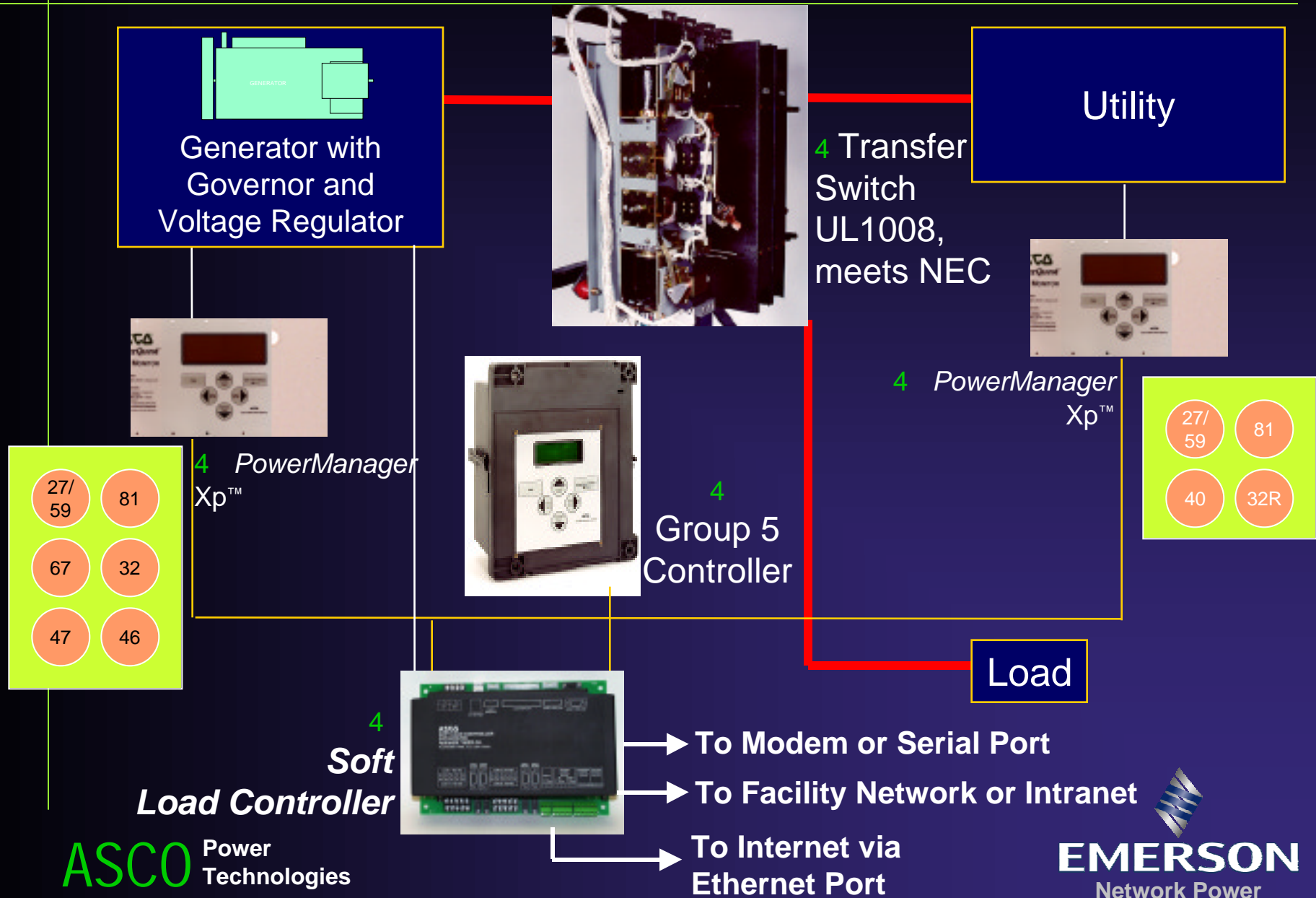
Transfer
Switch

So What's New that meets P1547?

■ New 7000 Series Soft Load Product Line

- **Primary Task is to “separate two paralleled sources in case of any abnormalities within system operation”**
- **Modular Construction**
- **Standardized Operational and Functional capabilities**
 - **User configurable soft load modes**
 - **Built-in Utility and Generator protective devices, flexible set-up to meet varying requirements**
 - **Ability to interact with different “electron” generators**
- **Available 200 Through 4000 Amperes, Up to 15KV**
- **Networked, Web Enabled**
- **Modbus, TCP/IP practicing Open Protocols**

7000 Series Soft Load Transfer



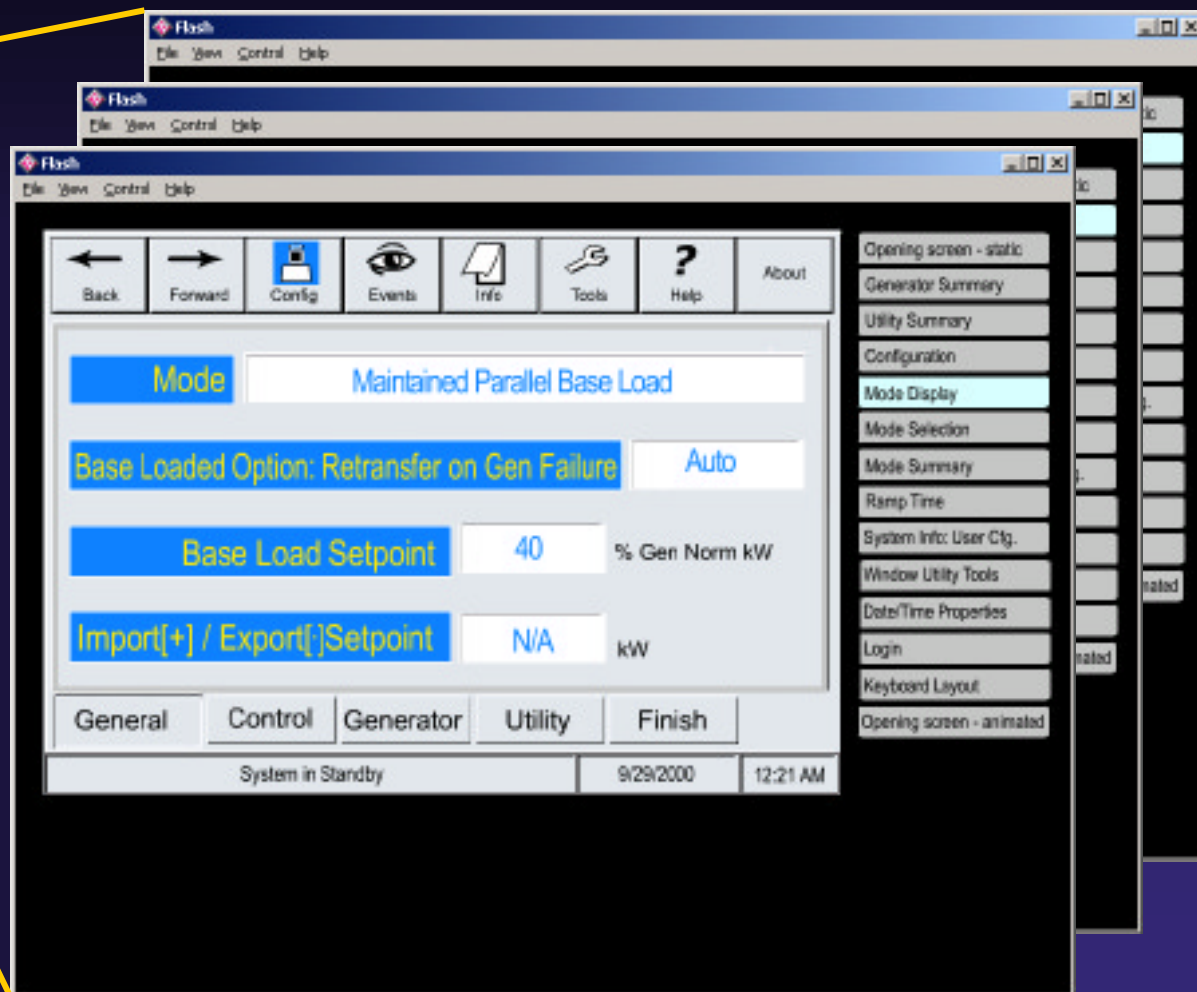
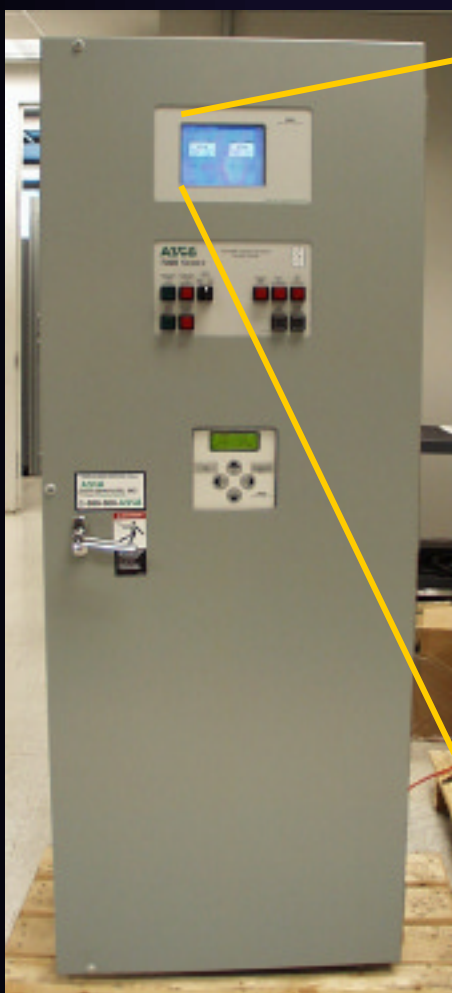
4 7000 Series Soft Load Transfer

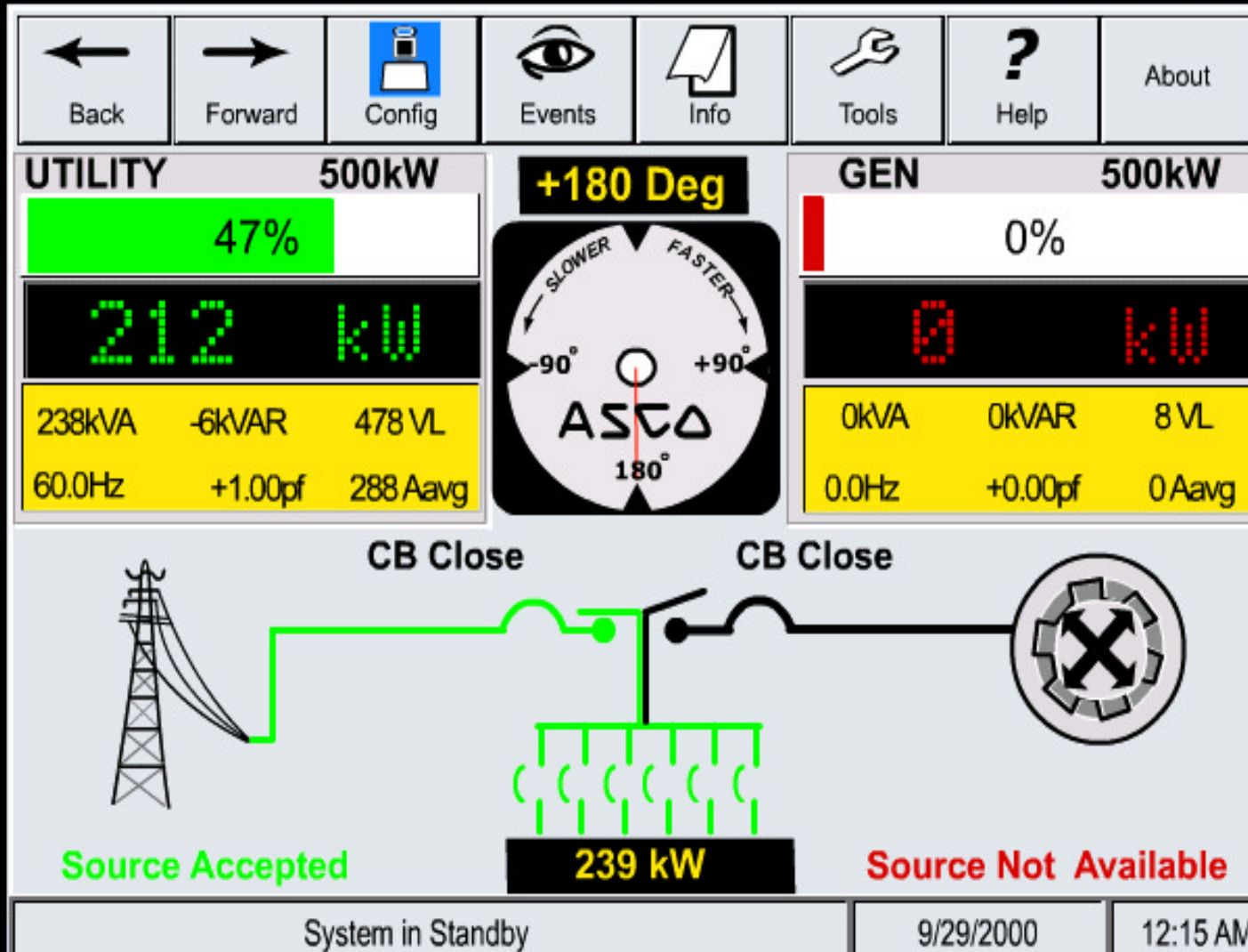
New vs. Traditional



- Soft Load Controller GUI Replaces:
 - Analog Metering
 - Status Displays
 - Soft Load Operator Controls
- Discrete Protective Relays Replaced by **PowerManager Xp™** Transducers on Generator & Utility
- No Programmable Logic Controller or Governor Controller Required

Easy Set-up procedure





- Opening screen - static
- Generator Summary
- Utility Summary
- Configuration
- Mode Display
- Mode Selection
- Mode Summary
- Ramp Time
- System Info: User Cfg.
- Window Utility Tools
- Date/Time Properties
- Login
- Keyboard Layout
- Opening screen - animated

4 7000 Series Soft Load Transfer Soft Load Controller

■ It Provides.

- User configurable operating modes for complete site defined customization using a standardized product offering.

Operating Modes include:

- **Islanding Mode** - Closed Transition Soft Load Transfer
- **Base Load Mode** - Maintained Utility Interconnect at Constant Generator Load
- **Import Mode** - Maintained Utility Interconnect with Utility Import Level Tracking
- **Export Mode** - Maintained Utility Interconnect with Generator Export Level Tracking

4 **7000 Series Soft Load Transfer Soft Load Controller**

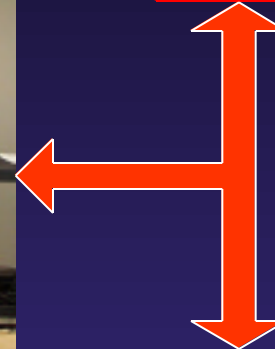
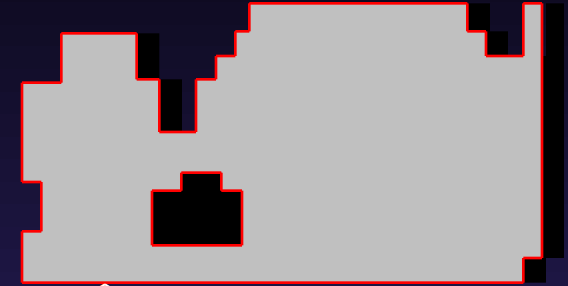
- **Controls, Analog outputs for**
 - *Engine Speed Control* (Synchronizing / kW Loading)
 - *Generator Voltage Regulator Control* (Voltage Matching / Power Factor).
- **Communications:**
 - **RS-232 & RS-485 Serial Interfaces to communicate with third party devices such as Caterpillar CCM (Engine Communications Control Module).**
 - **TCP/IP for Remote Access via Intranet (LAN) or Internet**
 - **SMTP (Simple Mail Transfer Protocol) for email or paging of status and alarms via Intranet/Internet.**
 - **Utilizes industry standard communications hardware, protocols, and security to monitor and control over local area networks and/or the Web.**

Common Applications

Utility Service



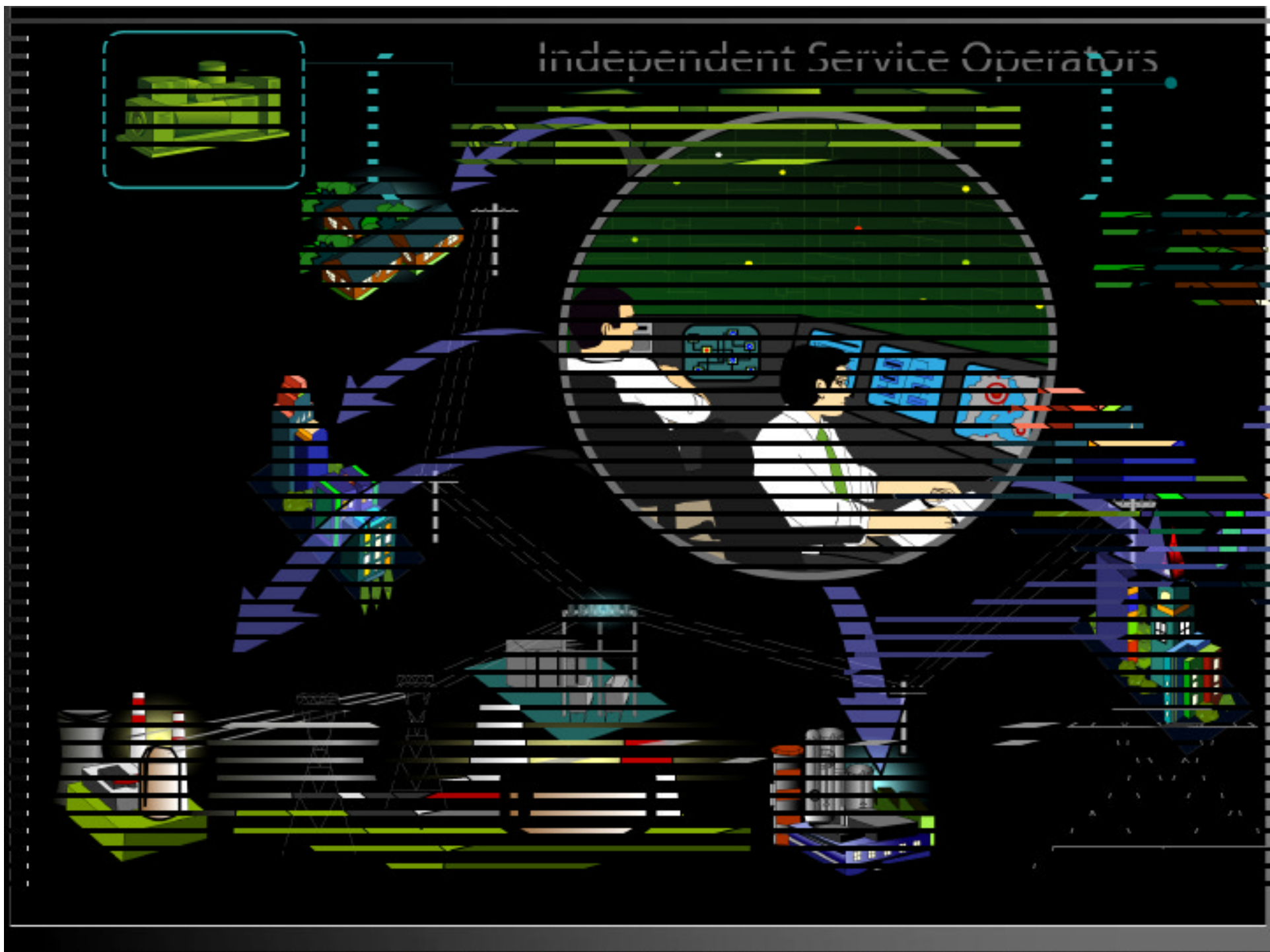
- ▶ Emergency System
- ▶ Prime Power Systems
- ▶ Peak Shaving System
- ▶ Utility/ISO promoted Curtailment Programs
- ▶many more....

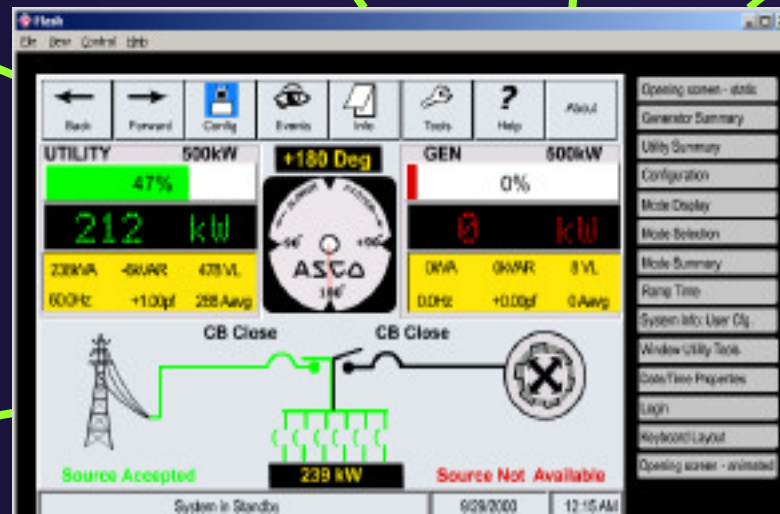


ASCO Power Technologies


EMERSON
Network Power

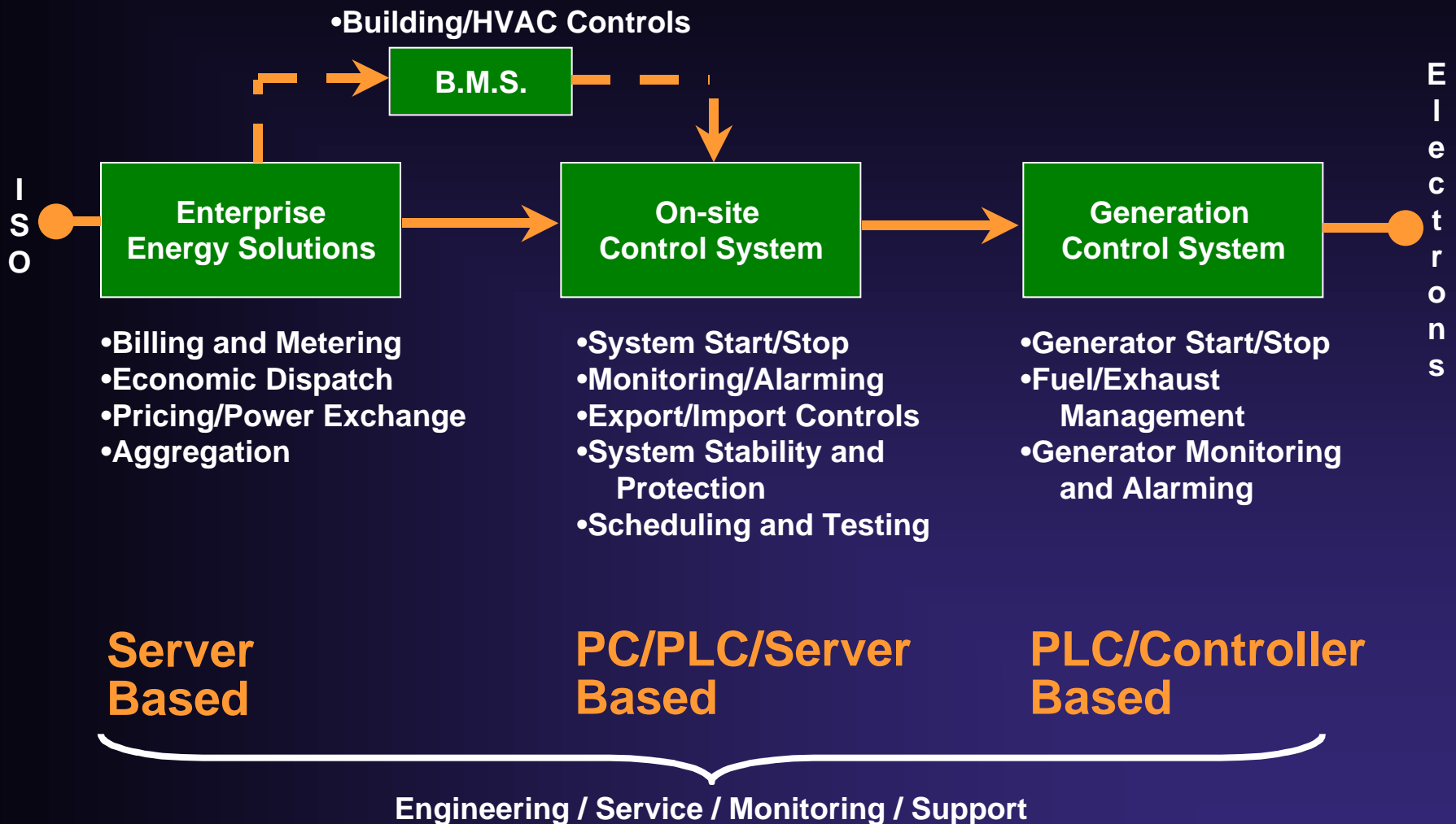
Independent Service Operators





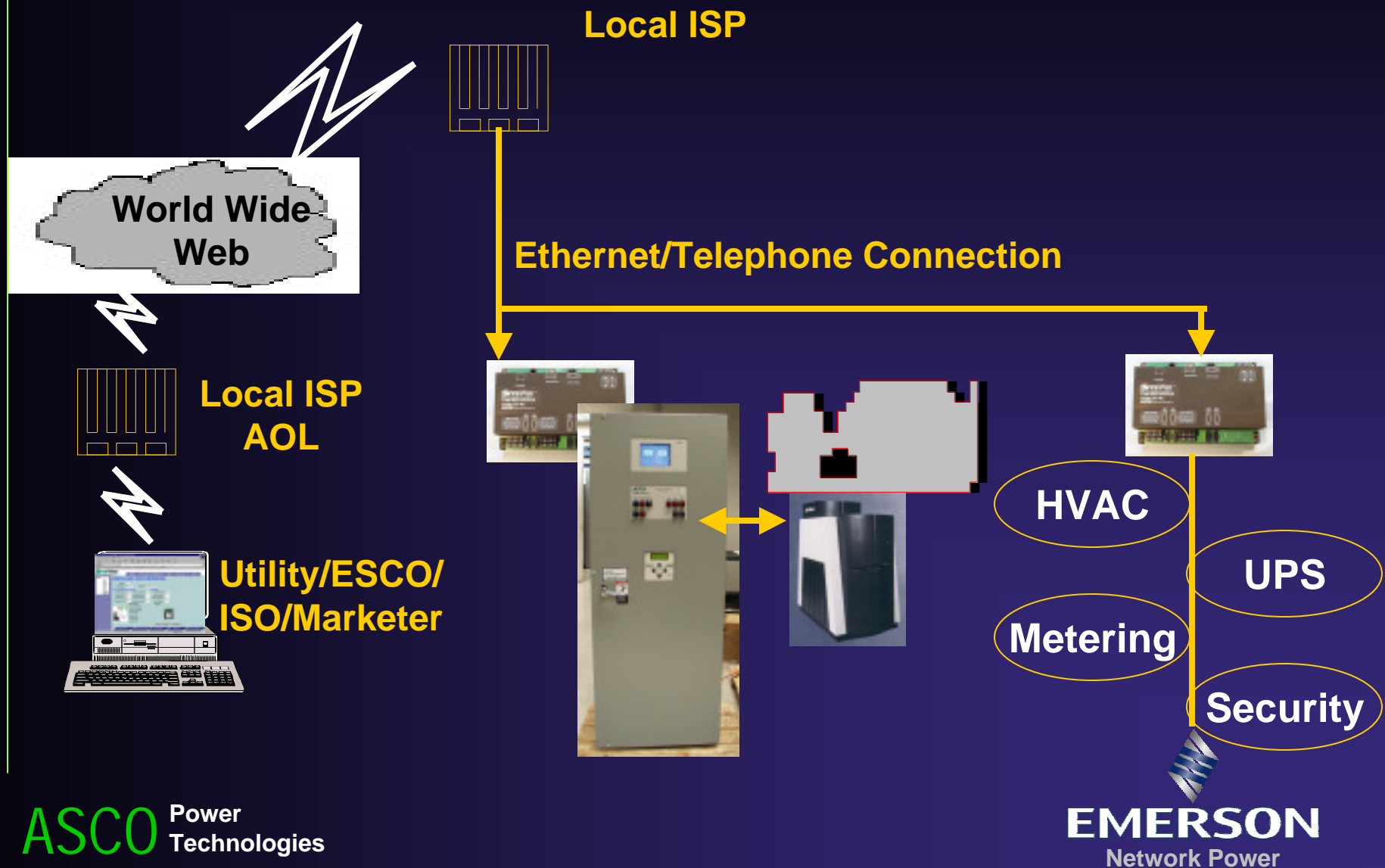
EMERSON
Network Power

Provides Grid to Chip Communications



Remote Monitoring and Control

Other devices and equipment



docSummary.vbd - Microsoft Internet Explorer

File Edit View Go Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Channels Fullscreen Mail Print

Address C:\Program Files\Microsoft Visual Studio\VB98\docSummary.vbd

Links Best of the Web Channel Guide Customize Links Internet Explorer News Internet Start

SITEWEB™
ASCO POWER MONITORING & CONTROL SYSTEM

Setting Summary Control Panel Data Monitor Engine Help

ASCO® THE POWER AUTHORITY

Chase Manhattan Bank

- New York
 - 4 NY Plaza
 - ATS3
 - ATS4
 - ATS5
 - ATS7
 - ATS8
 - Engine1
 - Engine2
 - 1 CMB RAZA
 - 55 Water St.
 - 270 Park Ave.
- Houston
 - 4 NY Plaza
 - ATS1
 - ATS7
 - Engine1
- Florida
 - Tampa Data Ctr
 - ATS7
 - Engine1

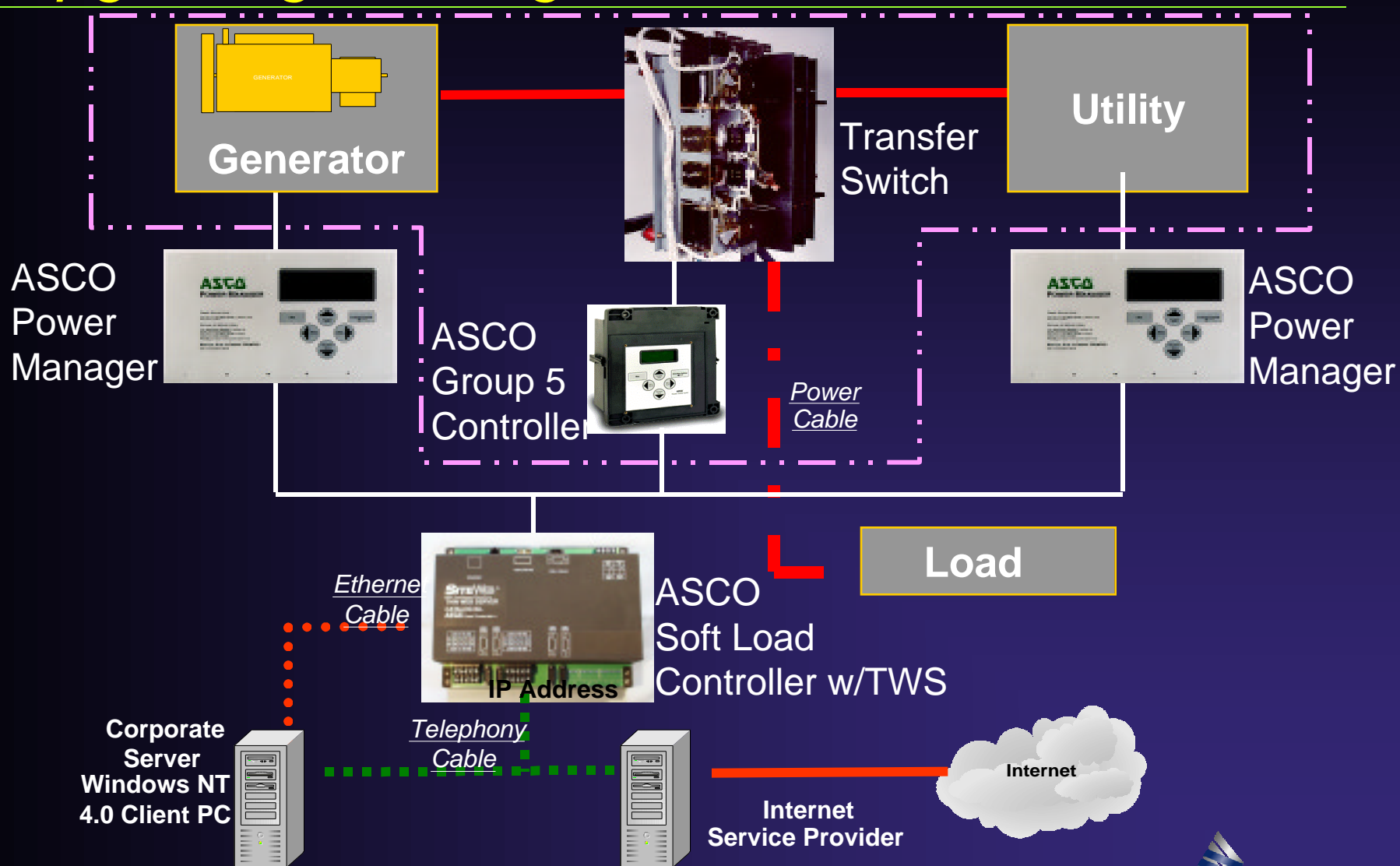
Port	Load Status	Name	Type	Vave	Iave	KW	Freq	PF	Alarm	Location
103	Load on Normal	ATS 3	OTTS	488	41	34	60	1	0	Production Col Z-19
104	Load on Normal	ATS 4	OTTS	485	80	66	60	1	0	Production Col Z-19
105	Load on Normal	ATS 5	OTTS	488	134	109	60	1	0	Production Sub B
107	Load on Normal	ATS 7	OTTS	211	147	51	60	1	0	60 Hanover ATS
108	Load on Normal	ATS 8	CTTS	211	147	51	60	1	0	Gen Room ATS
133	Load on Normal	ATS 8	CTTS	0	0	0	0	0	-1	
134	Load on Normal	ATS 8	CTTS	0	0	0	0	0	-1	

This is FREE !

Power Management Command / Control Genset Interface



Upgrading Existing 7000 Series Product



Thank You very much !

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Questions